

ABSTRACT

The present invention provides a cleaning agent for a substrate and a cleaning method thereof, which can effectively remove fine particles (particles) present on a surface of substrate or impurities derived from various kinds of metals (metallic impurities), without causing roughness surface of a substrate, in particular, a semiconductor substrate, and without causing corrosion or oxidation of metal wirings, in particular, copper wirings, provided on a surface of substrate, and can further remove at the same time a carbon defect present on a surface of substrate, without removing a metal corrosion inhibitor - Cu film, in particular, a Cu-BTA film.

The present invention provides a cleaning agent for a substrate comprising [I] an organic acid having at least one carboxyl group and/or [II] a complexing agent, and [III] an organic solvent selected from the group consisting of (1) monohydric alcohols, (2) alkoxyalcohols, (3) glycols, (4) glycol ethers, (5) ketones and (6) nitriles, and a cleaning method for a surface of substrate, which comprises the surface of substrate is treated with said cleaning agent.